The invention relates to the use of phosphinic pseudopeptide derivatives for production of a medicament for selectively inhibiting the active C-terminal site of angiotensin I converting enzyme. These derivatives are of formula (II):

$$\begin{array}{c|c} & O & & O \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\$$

where, R_1 may be a protecting group for amino functions usually used in peptide chemistry or an amino acid or a peptide protected by the above type of protecting groups, R_2 and R_3 correspond to a natural or unnatural amino acid side chain and R_4 and R_5 represent a hydrogen atom or a counterion.